PTO/SB/21 (03-03)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TIPA	TIO MEISOU.	Application Number	09/686	6,737					
TRANSMITTAL		Filing Date	Octob	per 10, 2000					
6 2 0 2003 FORM		First Named Inventor	χU	Alla					
(to be used for all correspondence after initial	filing)	Art Unit	1641	TEO. 21 200					
Manager	<b>.</b>	Examiner Name	DO, P	ensee CENTED					
Total Number of Pages in This Submission	6	Attorney Docket Number	ART-0	00102.P.1					
	ENCL	OSURES (Check all that	apply)	· · · · · · · · · · · · · · · · · · ·					
Fee Transmittal Form		Orawing(s)		After Allowance Communication to a Technology Center (TC)					
Fee Attached		icensing-related Papers		Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC					
Amendment/Reply		Petition Petition to Convert to a	ļ	(Appeal Notice, Brief, Reply Brief)					
After Final	│└──J F	Provisional Application		Proprietary Information					
Affidavits/declaration(s)		Power of Attorney, Revocation Change of Correspondence Addre	ess	Status Letter					
Extension of Time Request	1	Terminal Disclaimer		Other Enclosure(s) (please Identify below):					
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Response to Missing Parts/ Incomplete Application		mes of references; and Postcard							
Response to Missing Parts under 37 CFR 1.52 or 1.53									
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Firm David R. Preston or Reg No. 39 10	1								
Signature									
Date Argust 1	8.20	003							
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	I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231-on-this date:								
Typed or printed Roymo	nd	Alexandria VA	<u>.2.2.3/</u>						
Signature	Pu	000		Date Aug 18, 2003					

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

PTO/SB/17 (01-03) AUG OF STATE Approved for use through 04/30/2003. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE perwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Complete if Known **TRANSMITTAL** 09/686.737 **Application Number** Filing Date October 10, 2000 for FY 2003 ΧU First Named Inventor Effective 01/01/2003. Patent fees are subject to annual revision. **Examiner Name** DO, Pensee Applicant claims small entity status. See 37 CFR 1.27 1641 Art Unit TOTAL AMOUNT OF PAYMENT (\$) 0.00ART-00102.P.1 Attorney Docket No METHOD OF PAYMENT (check all that apply) FEE CALCULATION (continued) Money 3. ADDITIONAL FEES Check Other None Credit card Order Large Entity | Small Entity Deposit Account: Fee Fee Fee **Fee Description** Deposit Code Code (\$) Fee Paid (\$) 501321 Account 2051 130 1051 65 Surcharge - late filing fee or oath Number Deposit 50 2052 Surcharge - late provisional filing fee or 1052 David R. Preston Account cover sheet Name 1053 130 1053 130 Non-English specification The Commissioner is authorized to: (check all that apply) 1812 2,520 1812 2,520 For filing a request for ex parte reexamination ✓ Credit any overpayments Charge fee(s) indicated below 920\* Requesting publication of SIR prior to 1804 920 1804 ✓ Charge any additional fee(s) during the pendency of this application Examiner action Requesting publication of SIR after Examiner action Charge fee(s) indicated below, except for the filing fee 1805 1.840 1805 1.840\* to the above-identified deposit account. 2251 Extension for reply within first month 1251 110 **FEE CALCULATION** Extension for reply within second month 1252 410 2252 205 1. BASIC FILING FEE 2253 1253 930 465 Extension for reply within third month arge Entity Small Entity Fee Paid **Fee Description** Fee Fee Code (\$) Fee Fee Code (\$) 1254 1,450 2254 Extension for reply within fourth month Extension for reply within fifth month 1,970 2255 1255 1001 750 2001 375 Utility filing fee 1401 320 2401 1002 330 2002 165 Design filing fee 160 Notice of Appeal 2402 1402 320 160 Filing a brief in support of an appeal 1003 520 2003 260 Plant filing fee 140 Request for oral hearing 1403 280 2403 1004 750 2004 375 Reissue filing fee 1451 1,510 1451 1,510 Petition to institute a public use proceeding 1005 160 2005 80 Provisional filing fee 1452 110 2452 55 Petition to revive - unavoidable **SUBTOTAL (1)** (\$) 0.00 1453 1,300 2453 650 Petition to revive - unintentional 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE 1501 1.300 2501 650 Utility issue fee (or reissue) Fee from **Extra Claims** below Fee Paid 1502 470 2502 235 Design issue fee **Total Claims** -20 1503 630 2503 315 Plant issue fee Independent - 3\*\* 1460 130 1460 130 Petitions to the Commissioner Multiple Dependent 50 Processing fee under 37 CFR 1.17(q) 1807 50 1807 Large Entity **Small Entity** 180 Submission of Information Disclosure Stmt 1806 180 1806 Fee Fee Fee Description 40 Recording each patent assignment per Fee Code (\$) Code (\$) 8021 40 8021 property (times number of properties) 1202 2202 Claims in excess of 20 18 9 375 Filing a submission after final rejection 750 2809 1809 1201 84 2201 42 Independent claims in excess of 3 (37 ČFR 1.129(a)) 1203 280 2203 140 Multiple dependent claim, if not paid 375 For each additional invention to be 750 1810 2810 examined (37 CFR 1.129(b)) \*\* Reissue independent claims 1204 84 2204 42 375 Request for Continued Examination (RCE) over original patent 750 2801 1801 Request for expedited examination \*\* Reissue claims in excess of 20 1802 900 1802 900 1205 18 2205 9 and over original patent of a design application Other fee (specify) (\$) 0.00SUBTOTAL (2) \*Reduced by Basic Filing Fee Paid

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## **Patent**

Docket Number: ART-00102.P.1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	)	A.C.
XU et al.	) Examiner: DO	TECH AUG SENA
Application No.: 09/686,737	) Art Unit: 1641	TOENTE TOO
Filed: October 10, 2000	)	17/60p
For: COMPOSITION AND METHODS FOR SEPARATION OF MOIETIES ON CHIPS	) ) )	

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

#### INFORMATION DISCLOSURE STATEMENT

Sir:

At the Examiner's request, Applicants respectfully re-submit herewith a copy of Applicants' Form PTO 1449 and the References cited on the enclosed Form PTO 1449. This resubmission corresponds to Applicants' Information Disclosure Statement originally mailed March 1, 2001. This filing of duplicate materials is by request of the USPTO, thus no fee is deemed necessary.

Please apply any charges not covered, or any credits, to **Deposit Account 501321** in the name of David R. Preston & Associates having **Customer Number 24232**.

Respectfully submitted,

David R. Preston Reg. No. 38,710

Date: Hyllat 18, CCOS

David R. Preston & Associates, A.P.C. 12625 High Bluff Drive Suite 205

San Diego, CA 92130 Phone: 858-724-0375 Facsimile: 858-724-0384

# MATION DISCLOSURE **STATEMENT** BY APPLICANT

# 20 2003 € INF <b>€</b>	; RMA	TION DISC	LOSURE		Docket Numl ART-001		Applica 09/68	ation Number: 36,737
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicant: *	Xu et al.		» 41.	
J)		ral sheets if nece			Filing Date: October 1	0, 2000	Group 1641	Art UNICAL FILING DATE IF APPROPRIATE
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EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	PI	4,160,645	7/10/79	Ullr	nan			
	P2	4,275,149	6/23/81	Litn	nan et al.			
	Р3	4,318,980	3/9/82	Bog	uslaski et al.			
	P4	4,326,934	4/27/82	Poh	1			
	P5	4,390,403	6/28/83	Bate	chelder			
	P6	4,894,443	1/16/90	Gre	enfield et al.			
	P7	5,344,535	9/6/94	Bett	s et al.			
	P8	5,454,472	10/3/95	Ben	ecke et al.			·
	P9	5,569,367	10/29/96	Bett	s et al.			
	P10	5,612,474	3/18/97	Pate	el			
	Pli	5,653,859	8/5/97	Part	on et al.			
	P12	5,795,457	8/18/98	Peth	nig et al.			
	P13	5,814,200	9/29/98	Peth	nig et al.			
	P14	5,858,192	1/12/99	Bec	ker et al.			
· <u>-</u>	P15	5,883,760	3/16/99	Yan	nada et al.			
	P16	5,888,370	3/30/99	Bec	ker et al.			
	P17	5,993,630	11/30/99	Bec	ker et al.			
	P18	5,993,631	11/30/99	Part	on et al.			
	P19	5,993,632	11/30/99	Bec	ker et al.			

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		F2	WO 94/16101 A3	7/21/94	PCT				

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EXAMINER INITIALS		CITATION						~	
	DI	Ahn et al., IEEE T	rans. Magr	netics, 30:73-7	9 (1994)				·
	D2	Ahn et al., J. Micro	omechanica	al Systems, 5:	151-157 (1996	)			<u></u>
	D3	Batra et al., Mol. I	mmunolog	y, 30:379-386	(1993)				
	D4	Becker et al., J. Ph	ys. D: App	ol. Phys., 27:20	559-2662 (199	4)			
	D5	Becker et al., Proc	Natl. Aca	d. Aci. USA 9	2:860-864 (19	95)			
	D6	Burt et al., J. Phys.	E: Sci. Ins	strum., 22:952	-957 (1989)				
	D7	Cheng et al., Nat. l	Biotech., 1	6:541-546 (19	98)			-	
	D8	Cumber et al., Bio	conjugate (	Chem., 3:397-	401 (1992)				
	D9	De Gasperis et al.,	Biomedica	ıl Microdevice	es, 2:41-49 (19	99)			
· · · · · · · · · · · · · · · · · · ·	D10	Edman et al., Nucl	eic Acids F	Res., 25:4907-	4914 (1997)				
	D11	Fiedler et al., Anal	. Chem., 70	0:1909-1915 (	1998)	<del></del>			
	D12	Fiedler et al., Micr	osystem Te	echnologies, 2	:1-7 (1995)				
	D13	Fuhr et al., Biochin	n. Biophys	. Acta, 1108:2	215-223 (1992)	)			
	D14	Fuhr et al., Sensors	and Actua	ators A., 41:23	30-239 (1994)				

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	Examiner	Date	
	Signature	Considered	



# **OTHER DOCUMENTS**

0 2003 8		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)  CITATION  Fuhr et al., Cellular Engineering, Autumn:47-57 (1995)
RADRUME		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
EXAMINER INITIALS		CITATION
	D15	Fuhr et al., Cellular Engineering, Autumn:47-57 (1995)
	D16	Fuhr et al., Sensors and Materials, 7:131-146 (1995)
	D17	Gascoyme et al., IEEE Transactions on Ind. Appl., 33:670-678 (1997)
,	D18	Green and Morgan, J. Phys. D: Appl. Phys., 30:L41-L44 (1997)
	D19	Hagedorn et al., Electrophoresis, 13:49-54 (1992)
	D20	Hagedorn et al., J. Electrostatics, 33:159-185 (1994)
	D21	Hawkes et al., Microbios., 73:81-86 (1993)
	D22	Huang and Pethig, Meas. Sci. Technol., 2:1142-1146 (1991)
	D23	Huang et al., Phys. Med. Biol., 37:1499-1517 (1992)
	D24	Huang et al., J. Phys. D: Appl. Phys., 26:1528-1535 (1993)
	D25	Huang et al., Phys. Med. Biol., 40:1789-1806 (1995)
	D26	Huang et al., Biochim. Biophys. Acta, 1282:76-84 (1996)
	D27	Huang et al., Biophys. J., 73:1118-1129 (1997)
	D28	Huang et al., Biochim. Biophys. Acta, 1417:51-62 (1999)
	D29	Hughes et al., Biochim. Biophys. Acta, 1425:119-126 (1998)
	D30	Huston et al., Proc. Natl. Acad. Sci. USA, 85:5879-5883 (1988)
	D31	Ladurner et al., J. Mol. Biol., 273:330-337 (1997)
	D32	Liakopoulos et al., Transducers '97, pp. 485-488 (1997)
	D33	Markx et al., Microbiology, 140:585-591 (1994)
	D34	Morgan et al., Biophys. J., 77:516-525 (1999)
	D35	Muller et al., Biosensors and Bioelectronics, 14:247-256 (1999)
	D36	Newton et al., Biochemistry, 35:545-553 (1996)
	D37	Price et al., Bioichim. Biophys Acta, 954:221-230 (1988)

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Examiner	Date		
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## **OTHER DOCUMENTS**

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DEMENDED IN		OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	CENT	مي أ
EXAMINER INITIALS		CITATION	<b>~</b>	Q
	D38	Schnelle et al., Biochim. Biophys. Acta, 1157:127-140 (1993)		
	D39	Stephens et al., Bone Marrow Transplantation, 18:777-782 (1996)	ŗŝ	
	D40	Wang et al., J. Phys. D: Appl. Phys., 26:1278-1285 (1993)	. 8 .	
	D41	Wang et al., Biochim. Biophys. Acta., 1243:185-194 (1995)	% : • •	
	D42	Wang et al., IEEE Transactions on Industry Appl., 33:660-669 (1997)	:	
	D43	Wang et al., Biophys. J., 72:1887-1899 (1997)	<u></u>	
	D44	Wang et al., Biophys. J., 74:2689-2701 (1998)		
	D45	Washizu et al., IEEE Transactions on Industry Appl., 26:352-358 (1990)		
	D46	Washizu et al., IEEE Transactions on Industry Appl., 30:835-843 (1994)		
	D47	Whitlow et al., Protein Engineering, 6:989-995 (1993)		
	D48	Yang et al., Anal. Chem., 71:911-918 (1999)		

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